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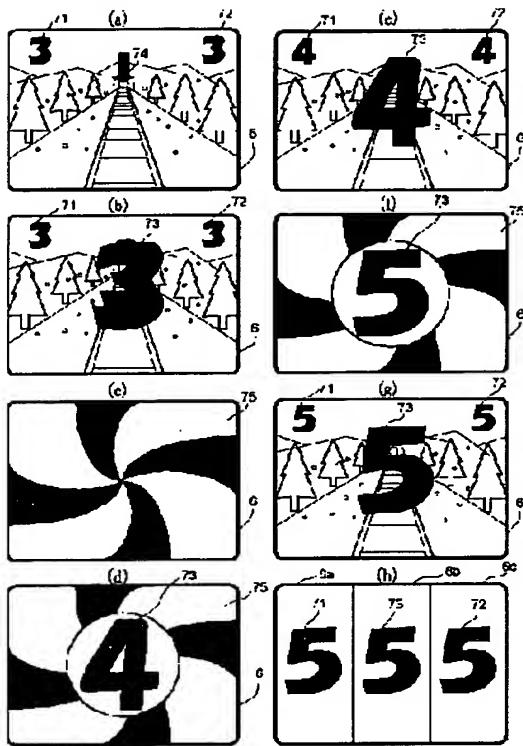
Summary

(57) [Abstract]

[Technical problem] The game machine which raises the interest of a game is offered with devising the updating display mode of an indicator—chart handle.

[Means for Solution] Into the left, after displaying a shutter 75 on the pattern display 6 specially in the snowy country tunnel reach pattern in the ** view game performed by change of three right indicator—chart handles, making a shutter 75 close and covering all the indicator—chart handles 71—73 and tunnel 74 grade, a shutter 75 is made to open wide in part, and the inside pattern 73 is updated and displayed on a pattern "4." Next, a shutter 75 is made to all open wide and the same pattern "4" as the inside pattern 73 is made to update the left figure handle 71 and the right figure handle 72. Thereby, a game person can be made to recognize that it was becoming it a great success.

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CLAIMS

[Claim(s)]

[Claim 1] It is the game machine characterized by the aforementioned change display-control means making other identification information update corresponding to renewal of the identification information stopped at the end on the aforementioned image display equipment based on the lottery result by the aforementioned lottery means by having the following. A change display-control means to stop a change display by stopping an updating display after

predetermined-time progress while making a change display perform by indicating the identification information displayed on image display equipment by updating, when satisfying the change display start condition set up beforehand A lottery means to perform the lottery for determining the process of the change display by the aforementioned change display-control means, and a result

[Claim 2] The aforementioned change display-control means is a game machine according to claim 1 characterized by making the number of updating of other identification information change on the aforementioned image display equipment corresponding to the number of updating of the identification information stopped at the end.

[Claim 3] The aforementioned change display-control means is a game machine according to claim 1 or 2 characterized by once covering the aforementioned identification information and making this identification information update.

[Claim 4] The aforementioned change display-control means is a game machine given in the claim 1 characterized by making all other identification information update on the aforementioned image display equipment corresponding to renewal of the identification information stopped at the end, or any 1 term of 3.

[Claim 5] The aforementioned change display-control means is a game machine according to claim 4 characterized by making all identification information besides the above update simultaneously.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to game machines, such as a pachinko game machine and a slot machine, and relates to the game machine which has the adjustable display function which indicates the predetermined identification information by change especially.

[0002]

[Description of the Prior Art] In game machines, such as a pachinko game machine, many things which raised game interest by the so-called adjustable display game which performs a change display by indicating the predetermined identification information (henceforth, indicator-chart handle) by updating, and determines whether the display result gives predetermined game value on display, such as a liquid crystal display (following, LCD:LiquidCrystal Display), are offered.

[0003] There are what is performed by using specially the display mentioned above as pattern display (following and ** view game), and a thing (henceforth, normal pattern game) to perform by usually using pattern display, combination, or other display as pattern display specially in an adjustable display game. ** -- a view -- a game -- and -- a normal pattern -- a game -- both -- predetermined -- a field -- passing -- a game -- a sphere -- detection -- following -- an indicator chart -- a handle -- updating -- a display -- carrying out -- an indicator chart -- a handle -- updating -- a display -- perfect -- having stopped -- the time -- a halt -- a pattern -- a mode -- specification -- a display -- a mode -- becoming -- *** -- a case -- " -- per -- " -- ** --

[0004] If it becomes "a hit" (following, great success) in a ** view game, the special electric accessory called a large winning-a-prize mouth or attacker will be made into an open state, and the state where winning a prize of a game sphere becomes very easy to a game person will be offered continuously fixed time. Here, in a ** view game, it is becoming it a great success, and an electric accessory calls a game state specially the state where very becomes easy [winning a prize of a game sphere] to a game person, and a bird clapper, by the open state and the bird clapper.

[0005] It becomes conditions in order to be in a game state specially, (generally an indicator-chart handle be equal to a specific display mode and bird clapper as which the halt pattern mode of the indicator-chart handle specially displayed on pattern display was usually determined beforehand in the same pattern). On the other hand, if it becomes "a hit" (henceforth, small hit) in a normal pattern game, an electric accessory will usually be made into an open state, and fixed time offer of the state where it is called an electric tulip type accessory or a mini attacker and where winning a prize of a game sphere becomes easy to a game person will be made.

[0006]

[Problem(s) to be Solved by the Invention] Thus, the biggest interest will be paid to whether for a game person, a halt pattern mode turns into a specific display mode, and a ** view game and a normal pattern game serve as "a hit." Especially the number of acquisition awarded balls in a ** view game has some which perform various production control in before decision of the halt pattern mode which can distinguish whether it is "becoming it a great success" since many [so / that it does not become as compared with the case of a normal pattern game], in order to raise game interest.

[0007] Moreover, also in game machines, such as a slot machine which carried not

only a pachinko game machine but LCD, there are some which perform the same production control as a pachinko game machine using LCD in the process of flag formation whose acquisition of the "bonus game" equivalent to "great success" in a pachinko game machine is attained. If it is in the game machine which performs such production control, in order to make the hope used as "great success" or flag formation of a "bonus game" continue as much as possible in the case of production control, the high production of a visual effect is demanded more.

[0008] this invention is devising the updating display mode of an indicator-chart handle, and aims at offering the game machine which raised game interest.

[0009]

[Means for Solving the Problem] In order to attain the above-mentioned purpose, the game machine concerning the 1st viewpoint of this invention When satisfying the change display start condition set up beforehand, while making a change display perform by indicating by updating the identification information displayed on image display equipment (for example, specially pattern display 6) A change display-control means to stop a change display by stopping an updating display after predetermined-time progress (for example, the game control section 200, the display-control section 400), It constitutes so that it may have a lottery means (for example, game control section 200) to perform the lottery for determining the process of the change display by the change display-control means, and a result. And a change display-control means makes other identification information update corresponding to renewal of the identification information stopped at the end on image display equipment based on the lottery result by the lottery means. That is, corresponding to renewal of the identification information stopped at the end, other identification information is updated on image display equipment.

[0010] As for a change display-control means, it is desirable to make the number of updating of other identification information change on image display equipment corresponding to the number of updating of the identification information stopped at the end. Furthermore, a change display-control means may once cover identification information, and may make identification information update. Moreover, as for a change display-control means, it is desirable to make all other identification information update on image display equipment corresponding to renewal of the identification information stopped at the end. Furthermore, a change display-control means may make all other identification information update simultaneously.

[0011] In order to attain the above-mentioned purpose, the record medium concerning the 2nd viewpoint of this invention in which computer reading is possible When satisfying the change display start condition set up beforehand, while making a change display perform by indicating by updating the identification information displayed on image display equipment (for example, specially pattern display 6) Change display processing which stops a change display by stopping an updating display after pr determined-time progress, The lottery processing which performs the lottery for determining the process of the change display by change display

processing, and a result, The program for making a computer perform the update process which makes all other identification information update corresponding to renewal of the identification information stopped at the end on image display equipment based on the lottery result by lottery processing is recorded.

[0012] That is, the program included in a record medium can be made to be able to read into a computer apparatus (for video game equipment to be included hereafter) etc., and the game machine of this invention can be easily realized by performing a series of processings. That is, with equipment, production, sale, distribution, etc. can be easily performed in the form where it became independent, as software goods by taking the gestalt of the record medium which recorded the program. Moreover, production control technology in this invention can be easily carried out by building this software into hardware, such as a computer apparatus.

[0013] In order to attain the above-mentioned purpose, the production control method concerning the 3rd viewpoint of this invention When satisfying the change display start condition set up beforehand, while making a change display perform by indicating by updating the identification information displayed on image display equipment (for example, specially pattern display 6) The change display procedure of stopping a change display by stopping an updating display after predetermined-time progress, The lottery procedure of performing the lottery for determining the process of the change display in a change display procedure and a result, and the update procedure which makes all other identification information update corresponding to renewal of the identification information stopped at the end on image display equipment based on the lottery result in a lottery procedure are included.

[0014] That is, the same effect as the game machine of this invention can be acquired by making a computer apparatus etc. perform the procedure by the above-mentioned method. That is, change display technology in this invention can be easily carried out on the hardware concerned by realizing the above-mentioned procedure using hardware, such as a computer apparatus.

[0015] Moreover, the production control technology in this invention can carry out easily by encoding the program or the data for making a computer apparatus etc. perform the procedure by the above-mentioned method, receiving the program code signal on which this subcarrier was overlapped, decrypting to an original program or original data, and performing a computer apparatus etc., while transmitting as a program code signal on which the subcarrier was overlapped.

[0016]

[Embodiments of the Invention] Hereafter, 1 operation gestalt of this invention is explained in detail, referring to a drawing. In the following explanation in addition, with a reach production display It stops in the state where indicator-chart handles other than the indicator-chart handle used as the last halt pattern are in agreement with the specific display mode which is becoming it a great success. Rocking, enlarging or contracting, or the state that is deforming, i.e., the state where the updating display

is continuously suspended between 1 commuter's tickets in a predetermined field, (these states are hereafter called temporary halt) Or possibility that a display result will serve as a specific display mode in the preceding paragraph story as which an end result is displayed like the state where the display position of an indicator-chart handle was changed, or the state where two or more indicator-chart handles synchronize, and the updating display is performed points out the thing of the production display raised seemingly.

[0017] Although a prepaid card explains taking the case of the 1st sort pachinko game machine of the card reader (CR:Card Reader) formula which performs a sphere loan as a game machine which performs a ** view game as a game machine in this example with the special pattern display which consists of LCD etc., as a game machine used as the candidate for application, it does not restrict to this. For example, it is applicable also to game machines, such as a slot machine which carried LCD.

[0018] Moreover, if it has image display equipment even if it is pinball machines, such as a pachinko game machine, it will not matter even if it is the pachinko game machine classified into the 2nd sort or the 3rd sort, a general **** machine or the pinball machine with a probability setting up function called contest a party, etc., for example. Furthermore, it is applicable not only to CR formula pachinko game machine (CR machine) which performs a sphere loan with a prepaid card but the pachinko game machine (cash machine) which performs a sphere loan with cash. That is, as long as it is the game machine which can perform the production display which has the special pattern display which consists of LCD etc., and is equivalent to a ** view game, you may be the thing of what gestalt.

[0019] Drawing 1 is the front view of the pachinko game machine in this example, and shows the arrangement layout of a primary member. The pachinko game machine (game machine) 1 is divided roughly, and consists of the game board (gage board) 10 which constitutes the game face of a board, and a frame 30 for game machines (underframe) which carries out support fixation of the game board 10. The game field 13 of the simultaneously circle configuration surrounded by the guide rail which consists of an inner rail 11 and an outside rail 12 is formed in the game board 10.

[0020] The game interest in the pachinko game machine 1 is mostly raised by the ** view game of the game field 13 which the pattern display 6 is specially arranged as image display equipment, and is specially carried out to a mid gear with the pattern display 6. Specially, the pattern display 6 is constituted by active-matrix type LCD by TFT (Thin Film Transistor), and displays a background image, a character picture, a special pattern, etc. in connection with a ** view game.

[0021] As a pattern, 12 indicator-chart handles of "##" showing the number and local train to "0" - "9" of the pachinko game machine in this example and "##" showing a limited express are prepared specially. Moreover, into the viewing area of the pattern display 6, three sp cial pattern viewing areas 6a, 6b, and 6c for

displaying a "special pattern left figure handle", "the pattern in a special pattern", and a "special pattern right figure handle" are formed specially. In addition, it is possible to replace by the display not only using LCD in this example but a CRT display, FED (Field EmissionDisplay), PDP (Plasma Display Panel) and EL (Electro Luminescence), a fluorescent display, or Light Emitting Diode as pattern display 6 specially.

[0022] Specially, the special pattern starting mouth (start CHAKKA) 5 which makes the electric tulip type accessory (usually electric accessory) 4 serve a double purpose, and the large winning-a-prize mouth (the 1st sort specially electric accessory) 7 which performs open operation by driving a solenoid etc. at the time of great success generating are located in a line up and down, and is arranged in the lower part position of the pattern display 6. As a result of performing a ** view game based on the winning-a-prize timing to the pattern starting mouth 5 specially, the large winning-a-prize mouth 7 performs open operation, when it is becoming it a great success. This open operation is performed continuously a maximum of 15 times a condition [a game sphere passing through the specific field 9 in the large winning-a-prize mouth 7]. The ** view hold storage displays 5a-5d to the pattern starting mouth 5 which display the storage state of winning a prize are specially arranged by the lower part of the pattern display 6.

[0023] The frame 30 for game machines is divided roughly, and consists of dark room 31 made from plastics and a front frame 32, and a wooden outer frame 33. The upper saucer unit 41 is attached in the lower position of dark room 31, and the lower saucer unit 51 is attached in it under the upper saucer unit 41. On the right-hand side of the lower saucer unit 51, the handle 56 for driving the discharge motor 55 is formed. Furthermore, the stereo loudspeakers 61L and 61R which carry out the reproduction output of the sound effect are formed in the right-and-left up position of dark room 31. The prepaid card unit 900 is arranged on the left-hand side of the pachinko game machine 1.

[0024] Drawing 2 is the block diagram showing the example of a system configuration centering on a game control section. The pachinko game machine 1 in this example is mainly equipped with a power supply section (power supply substrate) 100, the game control section (game control board) 200, the I/O section 300, the display-control section (display-control substrate) 400, the sound control section (sound control board) 500, the ramp-control section (ramp-control substrate) 600, the expenditure control section (expenditure control board) 700, and the information output section (information terminal substrate) 800.

[0025] It connects by the signal line, respectively, and the game control section 200, and each of other functional block 300, i.e., the I/O section, the display-control section 400, the sound control section 500, the ramp-control section 600, the expenditure control section 700 and the information output section 800 are constituted so that control command, data, etc. which contain a change display pattern command between the game control sections 200 can be delivered and

received. In addition, in this invention, the function which a change display-control means and a lottery means have is mainly realized by the game control section 200 and the display-control section 400.

[0026] The power supply section 100 consists of a fuse circuit 101 and a power circuit 102. The fuse circuit 101 is a protection network for preventing that the current exceeding the rated current flows to a power circuit 102. The alternating current supplied from the source 99 of alternating current is changed into predetermined voltage after rectifying to a direct current, and a power circuit 102 supplies it to each circuit in the pachinko game machine 1. In addition, the source 99 of alternating current changes and supplies the high-pressure alternating current acquired from a general source power supply to 24-volt alternating current.

[0027] The game control section 200 consists of various circuits prepared in the game control board. The initial reset circuit 201, The fixed reset circuit 202 and MCU203 for game control called security one chip (Micro Controller Unit), The address decoding circuit 204, I/O Port 205, and the switch input circuit 206, With the solenoid drive circuit 207, it has the pattern display circuit 208, the Light Emitting Diode drive circuit 209, the correspondence number circuit 210, the ramp-signal circuit 211, the winning-a-prize data signal input circuit 212, the awarded-balls number signal output circuit 213, and the information output circuit 214 specially.

[0028] The function which generates the uniform random number which uses the game control section 200 in a ** view game and a normal pattern game, The function to perform the flicker display of the function which outputs a change command to the display-control section 400, a lamp, and Light Emitting Diode, As opposed to the management equipment of a pachinko hole (game store) specially The number of winning a prize to the pattern starting mouth 5, It has the function which outputs various information, such as existence under generating of the great success in the number of times of effective starting of a ** view game, and a ** view game, the number of times of round continuation at the time of great success, probability change, or time shortening operation, injustice by winning a prize, and injustice by the omission of a connector.

[0029] The initial reset circuit 201 outputs the initial reset signal for resetting MCU203 for game control to the power up of the pachinko game machine 1 through a signal line 251. The fixed reset circuit 202 generates a fixed reset signal every about 2 mses by carrying out dividing of the reference clock signal outputted from an internal clock oscillator, and outputs it to MCU203 for game control through a signal line 252 as a timer-interruption signal. CPU221 performs again the program for [whenever a fixed reset signal is inputted] game control from a head.

[0030] MCU203 for game control is the so-called single chip microcomputer which formed ROM (Read Only Memory)222 and RAM (Random Access Memory)223 into 1 chip by using 8-bit CPU (Central Processing Unit)221 as a core, and makes the control center in the game control section 200 of the pachinko game machine 1.

[0031] MCU203 for game control performs various program processings per 1 sequence, performing writing or reading of data to RAM223 at any time according to the program procedure read from ROM222.

[0032] The address decoding circuit 204 inputs and decodes the address signal outputted through a signal line 253 from MCU203 for game control. As a result of decoding, the controlled system of MCU203 for game control outputs the signal for choosing any [ROM222 and RAM223 which are contained in MCU203 for game control, or] of I/O Port 205 they are to MCU203 for game control through a signal line 254.

[0033] I/O Port 205 is the interface of the various I/O signals treated by MCU203 for game control, outputs outside the control signal inputted through a signal line 255, or outputs the various signals inputted from the outside to MCU203 for game control through a signal line 255.

[0034] The input signal outputted from an input switch group through a signal line 256 is amplified by the buffer gate etc., and the switch input circuit 206 outputs it to I/O Port 205 through a signal line 257, after operating orthopedically as a pulse wave through a low pass filter etc. The solenoid drive circuit 207 outputs a drive control signal (excitation signal) to an output solenoid group through a signal line 259 based on the control signal outputted from I/O Port 205 through a signal line 258.

[0035] The pattern display circuit 208 outputs a command, a display timing signal, etc. from MCU203 for game control to the display-control section 400 through a signal line 261 based on the control signal outputted from I/O Port 205 through a signal line 260 specially. The Light Emitting Diode drive circuit 209 outputs the control signal which controls flicker operation of the ** view hold storage displays 5a-5d through a signal line 263 based on the input signal inputted from I/O Port 205 through a signal line 262,264,266. Moreover, the control signal which usually drives the pattern display 3 through a signal line 265 is outputted. Furthermore, the control signal which controls flicker operation of the normal pattern hold storage displays 2a-2d through a signal line 267 is outputted.

[0036] The correspondence number circuit 210 outputs the sound data from MCU203 for game control etc. to the sound control section 500 through a signal line 269 based on the control signal outputted from I/O Port 205 through a signal line 268. The ramp-signal circuit 211 outputs a ramp-control command etc. to the ramp-control section 600 through a signal line 271 based on the control signal outputted from I/O Port 205 through a signal line 270.

[0037] The winning-a-prize data signal input circuit 212 outputs the winning-a-prize data signal outputted from the expenditure control section 700 through a signal line 272 to MCU203 for game control through a signal line 273 and I/O Port 205. The awarded-balls number signal output circuit 213 outputs an awarded-balls number signal to the expenditure control section 700 through a signal line 275 based on the control signal outputted from I/O Port 205 through a signal line 274. That is, an awarded-balls number signal is given to the expenditure control section 700

according to the winning-a-prize data signal from the expenditure control section 700.

[0038] The information output circuit 214 is based on the control signal outputted from I/O Port 205 through a signal line 276. The great success information which shows under generating of great success, the probability change information which shows that it is in probability upset condition, The special pattern decision information which shows decision of the special pattern in a ** view game, the effective starting sphere information which shows the number of the starting winning-a-prize sphere used for the start of a ** view game, the common pattern decision information in a normal pattern game which usually shows decision of a pattern are outputted to the information output section 800 through a signal line 277.

[0039] Drawing 3 is the block diagram showing the example of a system configuration in the display-control section. The display-control section 400 consists of various circuits prepared in the display-control substrate, and the game control section 200 performs independently the display control for the image processing in a ** view game. The display-control section 400 displays specially the picture used for a ** view game based on the indicative-data signal specially outputted through a signal line 261 from the pattern display circuit 208 on the pattern display 6. For this reason, the display-control section 400 is equipped with an oscillator circuit 401, a reset circuit 402, MCU403 for display controls, control ROM 404 and I/O Port 405, a video display processor (following and VDP:Video Display Processor) 406, characters ROM407 and VRAM (Video RAM)408, and the LCD drive circuit 409.

[0040] An oscillator circuit 401 outputs a reference clock signal to MCU403 for display controls through a signal line 451, and a reset circuit 402 outputs the reset signal for resetting MCU403 for display controls through a signal line 452. MCU403 for display controls uses 64-bit CPU421 as a core, and MCU403 for display controls is equipped with a work RAM 422.

[0041] CPU421 will read the control data for a display control from control ROM 404 through a signal line 482, using a work RAM 422 as a working area through a signal line 481, if command data are specially inputted through a signal line 261 from the pattern display circuit 208. Moreover, CPU421 outputs a control signal to VDP406 through a signal line 454 based on the read control data.

[0042] Control ROM 404 is semiconductor memory which stores the various control programs used by MCU403 for display controls. I/O Port 405 is an interface for delivering the input signal from the game control section 200 to MCU403 for display controls. VDP406 has the function and high-speed drawing function for performing a screen display, and operates according to the drawing instruction from CPU421. Moreover, it has the two-dimensional address space which became independent in CPU421, and VRAM408 is mapped there.

[0043] VDP406 reads character image data from a character ROM 407 through a signal line 483 based on the inputted control signal. And display image data are

generated using the read character image data, and the image data is stored in VRAM408 through a signal line 484. Finally the image data stored in VRAM408 is read by VDP406. And VDP406 outputs the image data read from VRAM408 through the signal line 484 to the LCD drive circuit 409 through a signal line 455.

[0044] A character ROM 407 is for storing beforehand the high character image data, for example, the person, the animal, the character, figure, or sign of operating frequency also in the picture specially displayed on the pattern display 6. VRAM408 is the frame buffer memory for storing the image data generated by VDP406. The LCD drive circuit 409 changes the image data inputted from VDP406 through the signal line 455 into the video signal which consists of a chrominance signal and a synchronizing signal, and outputs it to LCD which constitutes the pattern display 6 specially through a signal line 456.

[0045] Drawing 4 is the block diagram showing the example of a system configuration in a sound control section. The sound control section 500 consists of various circuits prepared in the sound control board, and mainly performs the voice control for the speech processing in a ** view game.

[0046] The sound control section 500 is equipped with an oscillator circuit 501, a reset circuit 502, MCU503 for sound control, I/O Ports 504 and 505, the speech synthesis circuit 506, and the voice amplifying circuit 507. An oscillator circuit 501 outputs a reference clock signal to MCU503 for sound control through a signal line 551, and a reset circuit 502 outputs the reset signal for resetting MCU503 for sound control through a signal line 552.

[0047] MCU503 for sound control is equipped with ROM522 and RAM523 by using CPU521 as a core. CPU521 will read the data for a voice control etc. from ROM522 through a signal line 581, if command data are inputted through a signal line 269 from the correspondence number circuit 210. And the control signal corresponding to the data read from ROM522 is outputted to I/O Port 505 through a signal line 554, using RAM523 as a working area through a signal line 582.

[0048] I/O Port 504 is an interface for delivering the input signal from the game control section 200 to MCU503 for voice controls, and I/O Port 505 is an interface for delivering the output signal from MCU503 for voice controls to the speech synthesis circuit 506. The speech synthesis circuit 506 is for generating BGM (BackGround Music) and the sound effect in a ** view game, and the volume amplifying circuit 507 amplifying the sound signal generated by the speech synthesis circuit 506, and outputting to the stereo loudspeakers 61L and 61R.

[0049] That is, the sound control section 500 reproduces the voice used for a ** view game based on the voice data signal outputted through a signal line 269 from the correspondence number circuit 210 from the stereo loudspeakers 61L and 61R.

[0050] Next, operation (operation) of this example is explained.

[0051] First, the outline of the flow of the game in the pachinko game machine of this example is explained. By operating the handle 56 prepared in the lower right position of the pachinko game machine 1, the game sphere discharged by the

discharge motor 55 is guided at a guide rail, and is discharged all over the game field 13 in the game board 10.

[0052] In the game control section 200, the existence of inputs, such as a common pattern starting switch in the I/O section 300, a special pattern starting switch, a count switch, and a specific field switch, is supervised. When a game sphere wins specially a prize of the pattern starting mouth 5, while winning a prize of a game sphere is specially detected in a pattern starting switch, removal, logic conversion, etc. of the chattering of a detecting signal are performed, and input process is performed.

[0053] Moreover, when winning a prize of a game sphere is detected, while the number of the game spheres which won specially a prize of the bank for a pattern judging is specially memorized to a part for four in the pattern starting mouth 5, the lottery value of the random number at the time of winning a prize is also kept temporarily specially on the bank for a pattern judging. And based on winning—a-prize storage of the game sphere to the pattern starting mouth 5, i.e., the data kept specially on the bank for a pattern judging, a ** view game is specially started in the pattern display 6.

[0054] Hereafter, the content of processing in a game control section is explained in detail.

[0055] Drawing 5 is a flow chart which shows the example of processing operation in a game control section. MCU203 for game control in this example is usually started every about 2 mses with the timer-interruption signal outputted from the fixed reset circuit 202, as mentioned above. Namely, the game control section 200 uses a timer-interrupt method, and performs each following processing for every timer interrupt.

[0056] If the game control section 200 is started by the timer-interruption signal, the game control section 200 will perform the so-called stack set processing which sets a stack-pointer specification address to a stack pointer (it is only described as S101 below step S101:). Next, the game control section 200 checks the flag information for system checks. Here, when the flag information for system checks is the value from which the contents of RAM223 are unfixed like [just behind an overrun or powering on of a program], and a normal operation decision value differs, system check processing which clears the working area in RAM223 is performed (S102).

[0057] Subsequently, the game control section 200 performs time-sharing processing with information output processing which acquires the various flag information in a ** view game and a normal pattern game etc., and the output of the sound effect in a ** view game or a normal pattern game and sound output processing which outputs the audible tones at the time of CR unit un-connecting etc. at the time of ball rental (S103). Next, count switch processing corresponding to the state where the state of a count switch was detected and detected is performed (S104).

[0058] Then, specific field switch processing corresponding to the state where the state of a specific field switch was detected and detected is performed (S105). Next, ** view starting-switch processing corresponding to the state where the state of a pattern starting switch was detected and detected specially is performed (S106), and special pattern process processing which mentions a detail later is performed (S107). Similarly normal pattern starting-switch processing corresponding to the state where the state of a pattern starting switch was usually detected and detected is performed (S108), and common pattern process processing which mentions a detail later is performed (S109).

[0059] Subsequently, the random number R1 for a special pattern judging and the random number update process for usually updating the random number R2 for a pattern judging, the random number radiographic for a great success pattern judging, and each random number for a judgment of the random number RH for a reach judging which are the random number for a judgment used for a ** view game and a normal pattern game are performed (S110). Then, the random number RL for special pattern left which is a random number for indicator-chart handles used for a ** view game and a normal pattern game, the random number RC for the inside of a special pattern, and the indicator-chart handle random number update process for updating each random number of the random number RR for pattern right specially are performed (S111).

[0060] And in a count switch, the game control section 200 performs error processing which emits an audible tone if needed at the time of error generating while it detects inaccurate existence, such as "an error non-won a prize" whose prize a game sphere did not win into the released time of the large winning-a-prize mouth 7, or "a sphere plugging error" with which the game sphere has been got blocked into the large winning-a-prize mouth 7, and judges the existence of error generating (S112).

[0061] Moreover, through the switch input circuit 206, the game control section 200 inputs the detecting signal from an input switch group, and judges the winning-a-prize existence to each winning-a-prize mouth or winning-a-prize equipment. Furthermore, the game control section 200 performs output processing for transmitting commands, such as voice data, a display-control signal, a trim lamp and Light Emitting Diode, an information signal, a solenoid driving signal, and an awarded-balls number signal, to each output port (S113).

[0062] Then, the game control section 200 repeats the indicator-chart handle random number update process which updates the random number for indicator-chart handle determination, and the random number for a judgment until a timer-interruption signal is given from the fixed reset circuit 202 (S114). In addition, being updated here has the random number RH for a reach judging in addition to the random number for indicator-chart handle determination, and by the time a timer-interruption signal (every [for example,] 2 mses) is inputted, every one of the random numbers of these will be added, respectively.

[0063] The random number used by this example is each random number of the random number R1 for a pattern judging, the random number R2 for a common pattern judging, the random number radiographic for a great success pattern judging, the random number RL for special pattern left, the random number RC for the inside of a special pattern, the random number RR for special pattern right, and the random number RH for a reach judging specially. The function as a lottery means in this example is realized by acquiring these random numbers according to the winning-a-prize timing of for example, a game sphere. That is, the change display pattern command and halt pattern command which are sent to the display-control section 500 from the game control section 200 based on the lottery result of these random numbers are determined.

[0064] Specially, it is a random variable for judging whether in a ** view game, it considers as great success, and "0"- "630" is a range, and the random number R1 for a pattern judging is added to every reset interruption (2 mses) every [1], and has composition of "630" which next returns to "0." It is a random variable for judging the indicator-chart handle at the time of great success, and "0"- "11" is a range, and the random number radiographic for a great success pattern judging is added to every timer interrupt (2 mses) every [1], and has composition of "11" which next returns to "0."

[0065] It is a random variable for judging the random number RL for pattern left, and the temporary halt pattern at the time of performing a re-change display, when the random number RR for pattern right serves as HAZURE in a ** view game specially, the random number RC for the inside of a pattern, and specially. specially -- the random number RL for pattern left -- specially -- the random number RC for the inside of a pattern -- specially -- the random number RR for pattern right -- both -- " -- 0"- "11" is a range, and it adds one at a time and has composition of "11" which next returns to "0" The random number RL for pattern left is specially added every [1] during every timer interrupt (2 mses) and the indicator-chart handle random number update process shown in S114 of drawing 5 . specially however, the random number RC for the inside of a pattern Whenever the random number RL for pattern left carries out a beam riser to "0" from "11" specially, and whenever the random number RC for the inside of a pattern carries out the beam riser of the random number RR for pattern right to "0" from "11" specially, it adds one at a time.

[0066] It is a random variable for judging the production pattern (following and reach production pattern) when changing into a reach state, and "0"- "299" is a range, and the random number RH for a reach judging is added every [1] during every timer interrupt (2 mses) and the indicator-chart handle random number update process shown in S114 of drawing 5 , and has composition of "299" which next returns to "0." In case the random number RH for a reach judging performs setting processing of a reach flag, it is extracted, and it is used in order to choose a reach pattern from "reach distribution tabl data" as shown in [Table 1].

[0067]

[Table 1]
(パターン振り分けテーブルデータ)

パターン種別	低確率時		高確率時	
	ハズレ	当たり	ハズレ	当たり
パターンA	"0" ~ "49"	"0" ~ "9"	"0" ~ "180"	—
パターンB	"50" ~ "79"	"10" ~ "19"	"190" ~ "199"	—
パターンC	"80" ~ "109"	"20" ~ "99"	"200" ~ "209"	"0" ~ "16"
パターンD	"110" ~ "139"	"40" ~ "49"	"210" ~ "219"	—
パターンE	"140" ~ "169"	"50" ~ "69"	"220" ~ "229"	"20" ~ "39"
パターンF	"170" ~ "189"	"70" ~ "79"	"230" ~ "239"	—
パターンG	"190" ~ "209"	"80" ~ "99"	"240" ~ "249"	"40" ~ "59"
パターンH	"210" ~ "229"	"100" ~ "109"	"250" ~ "254"	"60" ~ "79"
パターンI	"230" ~ "219"	"110" ~ "129"	"255" ~ "261"	"80" ~ "109"
パターンJ	"250" ~ "269"	"130" ~ "149"	"265" ~ "269"	"110" ~ "129"
パターンK	"270" ~ "284"	"150" ~ "179"	"270" ~ "279"	"130" ~ "159"
パターンL	—	"180" ~ "189"	—	"160" ~ "179"
パターンM	"285" ~ "294"	"190" ~ "219"	"280" ~ "289"	"180" ~ "219"
パターンN	—	"220" ~ "229"	—	"220" ~ "239"
パターンO	"295" ~ "299"	"230" ~ "289"	"290" ~ "299"	"240" ~ "279"
パターンP	—	"290" ~ "299"	—	"280" ~ "299"

[0068] As shown in Table 1, the reach pattern of Pattern A – Pattern P is set up, and it is chosen by the value of the random number RH for a reach judging here whether it considers as which reach pattern. For example, at the time of low probability, if the value of the random number RH for a reach judging is "38", when the random number R1 for a pattern judging is HAZURE specially, Pattern A is chosen, the random number R1 for a pattern judging hits specially, it comes out, and, in a certain case, Pattern C is chosen. On the other hand, although Pattern A will be chosen at the time of high probability when the random number R1 for a pattern judging is HAZURE specially if the value of the random number RH for a reach judging is "168", the random number R1 for a pattern judging hits specially, it comes out, and, in a certain case, the pattern L of premium reach which it is not concerned with the value of the random number RH for a reach judging, and Patterns A, B, D, and F are not chosen, and serves as great success.

[0069] Specially, there are two or more change display patterns, and the game

control section 200 chooses as a pattern the change display pattern used by the operating state of the pachinko game machine 1, and outputs to it the change display pattern command which directs a predetermined change display pattern in the display-control section 400. By this, the display-control section 400 is performing the display based on the change display pattern set up beforehand, and performs various production control containing each reach production pattern mentioned above.

[0070] Drawing 6 is a flow chart which shows the example [in / pattern process processing / specially] of processing of drawing 5 . By pattern process processing, corresponding processing is specially performed alternatively according to the ** view flag information for controlling the pachinko game machine 1 in predetermined sequence according to a game state. And the value of ** view flag information is updated during each processing according to a game state. By pattern process processing, each processing shown below corresponding to ** view flag information is performed specially.

[0071] When the value of ** view flag information is "0", it judges whether the random number value which cast lots in the ** view game is in agreement with a great success value, or "special pattern usual processing" in the usual game states, such as processing specially reported outside by lighting of the ** view hold storage displays 5a-5d corresponding to a pattern winning-a-prize storage counter, is performed (S201). When the value of ** view flag information is "1", "special pattern great success judging processing" which judges whether it became a great success mode about the pattern specially stopped on the pattern display 6 is performed (S202).

[0072] When the value of ** view flag information is "2", "special pattern halt pattern setting processing" which sets up the halt pattern in the ** view game specially performed on the pattern display 6 is performed (S203). When the value of ** view flag information is "3", "change display pattern setting processing" which sets up the change display pattern of the pattern of the ** view game specially performed on the pattern display 6 is performed (S204).

[0073] When the value of ** view flag information is "4", "special pattern change processing" which performs change processing in a ** view game in the pattern display 6 specially is performed (S205). When the value of ** view flag information is "5", "special pattern halt processing" which performs principle halt processing of a pattern specially is performed (S206).

[0074] When the value of ** view flag information is "6", "large winning-a-prize mouth opening pretreatment" which performs initialization processing for great success operation is performed (S207). When the value of ** view flag information is "7", it performs "processing during large winning-a-prize mouth opening" (S208).

[which checks the released time of various processings about great success operation, and the large winning-a-prize mouth 7 per time]

[0075] When the value of ** view flag information is "8", passage of the game

sphere to a specific field switch is supervised, and "specific field effective-time processing" which judges whether the pattern process was completed specially is performed (S209). When the value of ** view flag information is "9", it judges specially whether it is pattern process killing, and if it is an end, clearance of a demonstration display (screen under great success) flag and "great success end processing" which clears information during the clearance of an indicator-chart handle, the clearance of a great success end display, and great success at the time of great success will be performed (S210).

[0076] In addition, as each processing specially performed in pattern process processing, it does not restrict only to the processing mentioned above, and it may replace by other processings or processing of further others may be added. Moreover, when the contents of processing of each processing which branches with the value of ** view flag information can be complicated and processing cannot be made to complete within reset interruption time, you may make it add two or more same processings.

[0077] In a ** view game, when a game sphere passes the pattern starting mouth 5 specially, great success of a pattern and HAZURE are specially judged with the value of the random number R1 for a pattern judging. When it is becoming it a great success as a result of a judgment, the combination of the special pattern corresponding to the value of the random number radiographic for a great success pattern judging is specially displayed on the pattern display 6 at the pattern display 6. On the other hand, when it becomes HAZURE, the random number RL for pattern left, the random number RC for the inside of a special pattern, and the special pattern corresponding to the value of the random number RR for pattern right are displayed specially.

[0078] Hereafter, based on the change display pattern command sent from the game control section 200 as mentioned above, CPU421 of the display-control section 400 executes a program, and the processing in the case of performing reach production with the pattern specially changed on the pattern display 6 is explained. Here, three, Pattern A – Pattern C, are explained. In addition, if the image display seemingly same on the pattern display 6 is made specially, although CPU421 of the display-control section 400 does not necessarily need to perform the program according to the following flow charts, it explains each pattern as what performs processing which CPU421 shows to each flow chart here.

[0079] (1) Usually, change pattern drawing 7 is drawing usually showing the example of a display on the special pattern display 6 at the time of a change pattern. In this example, each display mode of the special pattern viewing areas 6a, 6b, and 6c at the change display start time (at the last change display end time) shall be "1", "2", and "3", and the last display mode after a change display shall turn into a HAZURE mode of "3", "6", and "8."

[0080] first, when starting change of an indicator-chart handle from the idle state of the display mode of "1", "2", and "3" as shown in drawing 7 (a), it is shown in

drawing 7 (b) — as — specially — a pattern left figure handle (henceforth, left figure handle) — specially — the pattern in a pattern (henceforth, inside pattern) — and it makes down indicate the pattern right figure handle (henceforth, right figure handle) by scrolling from a top specially After starting the scrolling display of a left figure handle, an inside pattern, and a right figure handle and a fixed period passes, the scrolling display speed of a left figure handle is reduced, and as shown in drawing 7 (c), a temporary halt is carried out in a pattern "3."

[0081] Next, the scrolling display speed of a right figure handle is reduced similarly, and as shown in drawing 7 (d), a temporary halt is carried out in a pattern "8." And as the scrolling display speed of an inside pattern is reduced and it is shown in drawing 7 (e), it is made to stop in a pattern "6" and a left figure handle and a right figure handle are stopped completely. Thereby, a game person is shown that the ** view game was decided by HAZURE.

[0082] (2) Pattern A (normal reach pattern)

Drawing 8 is a flow chart which shows display processing of a normal reach pattern. Drawing 9 is drawing showing the example of a display on the special pattern display 6 at the time of a normal reach pattern. In this example, each display mode of the special pattern viewing areas 6a, 6b, and 6c at the change display start time shall be "1", "2", and "3", and the last display mode after a change display shall turn into a HAZURE mode of "3", "9", and "3." A change display is made to start from the idle state of the display mode of "1", "2", and "3" as shown in drawing 9 (a) also in this case, and as shown in drawing 9 (b), a left figure handle, an inside pattern, and the right figure handle are indicated by scrolling one by one.

[0083] After starting the scrolling display of a left figure handle, an inside pattern, and a right figure handle and a fixed period passes, usually, with the same procedure as the case of a HAZURE change pattern, the scrolling display speed of a left figure handle is reduced, and as shown in drawing 9 (c), a temporary halt is carried out in a pattern "3." Next, the scrolling display speed of a right figure handle is reduced, and as shown in drawing 9 (d), a temporary halt is carried out in a pattern "3." In this way, a left figure handle and a right figure handle carry out a temporary halt with the indicator—chart handle of the same classification, and will be in a reach state.

[0084] Next, the scrolling display speed of an inside pattern is reduced (S601), and it judges whether predetermined production time passed (S602). When predetermined production time has not passed, it returns to (S602;No) and S602, and it judges whether predetermined production time passed again.

[0085] When predetermined production time passes, (S602;Yes) and an inside pattern are substituted for the indicator—chart handle in front of 3 patterns of the indicator—chart handle which finally stops from the indicator—chart handle which is performing the present change display (S603). Then, the scrolling display speed of an inside pattern is reduced again (S604), and as shown in drawing 9 (e), a temporary halt is carried out in a pattern "9" (S605). And after a fixed period passes, as shown in drawing 9 (f), an indicator—chart handle is stopped completely (S606). Thereby,

although it changed into the reach state, it is indicated to be it to a game person that the ** view game was decided by HAZURE.

[0086] (3) Pattern B (tunnel reach pattern)

After being in a reach state, a tunnel reach pattern is a reach pattern with which an inside pattern is updated, when it changes to the screen of the tunnel seen from the train which the pattern display 6 top does not illustrate specially, for example, a train passes through a tunnel. This example explains two tunnel reach patterns as shown below.

[0087] (3-**) Normal tunnel reach pattern drawing 10 is a flow chart which shows display processing of a normal tunnel reach pattern. Drawing 11 is drawing showing the example of a display on the special pattern display 6 at the time of a normal tunnel reach pattern. In addition, in this example, it explains from the place where the display mode of a left figure handle and a right figure handle will be in a reach state by "3." Moreover, if it will attach by the time it will be in a reach state, it is the same as that of Pattern A.

[0088] If the display mode of the left figure handle 71 and the right figure handle 73 will be in a reach state by "3" as shown in drawing 11 (a), the whole screen of the pattern display 6 will be made to carry out the white fade specially, applying the white taste, and as shown in drawing 11 (b), the tunnel (tunnel seen from the train) 74 specially prepared on the pattern display 6 in the mountain slope will be displayed (S701). Moreover, the left figure handle ("3") 71 and viewing-area top right-hand side are made to carry out the reduced display of the right figure handle ("3") 72 to a viewing-area upper left side.

[0089] Next, as shown in drawing 11 (c), a train rushes into a tunnel (S702) and changes the pattern display 6 top to the screen in tunnel 74 specially. The inside pattern ("0") 73 is displayed in tunnel 74. And the inside pattern 73 is made to expand so that it may correspond to advance of a train as shown in drawing 11 (d) (S703).

[0090] Then, it distinguishes whether the inside pattern 73 is a halt pattern (S704). When the inside pattern 73 is not a halt pattern, as shown in (S704;No) and drawing 11 (e), a train is extricated from tunnel 74 (S705), and it returns to S702. And it is made to rush into tunnel 74 again (S702). In tunnel 74, while being updated, a pattern 73 ("1") is displayed, and the inside pattern 73 is made to expand here so that it may correspond to advance of a train as shown in drawing 11 (f) (S703). Thus, the inside pattern 73 is updated by rushing into the following tunnel 74.

[0091] It is made to stop, after making the inside pattern 73 reduce as shown in (S704;Yes) and drawing 11 (g), when the inside pattern 73 is a halt pattern. And as shown in drawing 11 (h), an indicator-chart handle is stopped completely. Thereby, a game person is shown that the ** view game was decided by the blank.

[0092] Since the inside pattern 73 is slowly updated according to advance of a train according to the normal tunnel reach pattern as explained above, a game person has the hope of great success and has observed the pattern display 6 specially for a

long time. Thereby, the interest of a game can be raised.

[0093] (3-**) Snowy country tunnel reach pattern drawing 12 is a flow chart which shows display processing of a snowy country tunnel reach pattern. Drawing 13 is drawing showing the example of a display on the special pattern display 6 at the time of a snowy country tunnel reach pattern. This snowy country tunnel reach pattern is a reach pattern which developed from the normal tunnel reach pattern, and the same display as a normal tunnel reach pattern is performed until a train passes through a one-eyed tunnel (drawing 15 (a) – (d)).

[0094] Like a normal tunnel reach pattern, if the display mode of a left figure handle and a right figure handle will be in a reach state by "3", the whole screen of the pattern display 6 will be made to carry out the white fade specially, applying the white taste (S801), and tunnel 74 will be specially displayed on the pattern display 6. Next, after making a train rush into tunnel 74 and displaying the inside (S802) pattern 73, a train is extricated from tunnel 74 (S803).

[0095] If a train escapes from tunnel 74, as shown in drawing 13 (a), the tunnel 74 (tunnel seen from the train) specially prepared on the pattern display 6 in the mountain slope of a snowy country will be displayed (S804). Moreover, the left figure handle ("3") 71 is turned on the upper left side of a viewing area, and the reduced display of the right figure handle ("3") 72 is carried out to the upper right side of a viewing area. And the pattern ("3") used as the same great success as the left figure handle 71 and the right figure handle 72 is displayed on the inside pattern 73, and the inside pattern 73 is made to expand to it so that it may correspond to advance of a train as shown in drawing 13 (b). Thus, since the indicator-chart handle which is becoming it a great success is displayed on the inside pattern 73, it turns out that great success decided the game person.

[0096] Next, as shown in drawing 13 (c), after displaying a shutter 75 on a viewing area, making a shutter 75 close and covering the complete diagram handles 71–73 and tunnel 74 grade, as shown in drawing 13 (d), a shutter 75 is made to open wide in part, and the inside pattern 73 is updated and displayed on a pattern "4" (S805). Then, a shutter 75 is made to all open wide and the same pattern "4" as the inside pattern 73 is made to update the left figure handle 71 and the right figure handle 72, as shown in drawing 13 (e) (S806).

[0097] Next, it distinguishes whether the inside pattern 73 is a halt pattern (S807). After performing switching action of a shutter 75 and updating the inside pattern 73 as it returns to (S807;No) and S805 and is shown in drawing 13 (f) when the inside pattern 73 is not a halt pattern (S805), the left figure handle 71 and the right figure handle 72 are made to update, as shown in drawing 13 (g) (S806). When the inside pattern 73 is a halt pattern, after it stops (S807;Yes) and the inside pattern 73 (S808) and a fixed period passes, a complete diagram handle is made to decide, as shown in drawing 13 (h) (S809).

[0098] Since the left figure handle 71 and the right figure handle 72 are made to correspond to the inside pattern 73 and are made to update according to the snowy

country tunnel reach pattern as explained above after making the inside pattern 73 update by the switching action of a shutter 75, rather than all the so-called rotation reaches, change can be given to a change pattern and game interest can be enlivened. Thereby, the interest of a game can be raised.

[0099] (4) Pattern C (exhaust gas reach pattern)

An exhaust gas reach pattern is a reach pattern with which the pattern covered with the exhaust gas which was made to display an automobile on the pattern display 6 specially, and was discharged from the automobile is updated, after being in a reach state. Drawing 14 is a flow chart which shows display processing of an exhaust gas reach pattern. Drawing 15 and drawing 16 are drawings showing the example of a display on the special pattern display 6 at the time of an exhaust gas reach pattern. In this example, the display modes at the change display start time shall be "3", "2", and "8", and the last display mode after a change display shall turn into a great success mode of "7", "7", and "7."

[0100] First, the scrolling display (change display) of the complete diagram handle of a left figure handle, an inside pattern, and a right figure handle is made to start from the idle state of the display mode of "3", "2", and "8" as shown in drawing 15 (a), as shown in drawing 15 (b) (S901). After starting the scrolling display of a complete diagram handle and a fixed period passes, the scrolling display speed of a left figure handle is reduced, and as shown in drawing 15 (c), a temporary halt of the left figure handle is carried out in a pattern "2" (S902). Then, as shown in drawing 15 (d), a temporary halt of the inside pattern is carried out in a pattern "2" (S903). Next, as shown in drawing 15 (e), a temporary halt of the inside pattern is carried out in a pattern "1" (S904), and a temporary halt is carried out in a blank mode.

[0101] After a temporary halt is carried out in a blank mode and carrying out predetermined period progress, an automobile 81 is made to appear from the right-hand side of the pattern display 6 specially, as shown in drawing 15 (f) (S905). Next, an inside pattern is made to cover, as an automobile 81 is advanced on the left-hand side of drawing 15 , exhaust gas 82 is made to blow off from the posterior part of an automobile 81 in the place where the posterior part of an automobile 81 passed the right figure handle, and a right figure handle is made to cover, then it is shown in drawing 15 (h), and the right figure handle 83 is made to cover, as are shown in drawing 15 (g), and further shown in drawing 16 (a) (S906).

[0102] Next, exhaust gas 82 is moved to the left-hand side of drawing 16 , and the right figure handle 83 is updated and displayed on a pattern "3" (S906). Furthermore, exhaust gas 82 is moved to the left-hand side of drawing 16 , a left figure handle and an inside pattern are updated for the pattern ("3") used as the same great success as the right figure handle 83, and ** is displayed (S907).

[0103] Then, it distinguishes whether each pattern is a halt pattern (S908). When each pattern is not a halt pattern, it returns to (S908;No) and S905, and as shown in drawing 16 (d) – drawing 16 (g), processing of S905-S907 is repeated again. When each pattern is a halt pattern, after it stops (S908;Yes) and each pattern and a fixed

period passes, a complete diagram handle is made to decide, as shown in drawing 16 (h) (S909). Thereby, a game person is shown that the ** view game was decided by great success.

[0104] As explained above, since change can be given to a change pattern rather than all the so-called rotation reaches like a snowy country tunnel reach pattern according to the exhaust gas reach pattern, game interest can be enlivened.

Thereby, the interest of a game can be raised.

The gestalt] this invention of operation of others [] is not restricted to the gestalt of the above-mentioned operation, but various deformation and application are possible for it. Hereafter, the gestalt of other operations of this invention is explained.

[0105] Although all other patterns (the right figure handle 71 and left figure handle 72) are made to update with the gestalt of the above-mentioned operation corresponding to the last halt pattern after making the last halt pattern (for example, pattern 73 while being able to set to a snowy country tunnel reach pattern) update this invention is not limited to this and may make only the right figure handle 71 update in a snowy country tunnel reach pattern corresponding to an inside pattern. Moreover, when all other patterns (the right figure handle 71 and left figure handle 72) make a pattern "4" update a pattern 73 in a snowy country tunnel reach pattern that what is necessary is just to make it update corresponding to the last halt pattern while being shown in drawing 13 (d), they may update and display the right figure handle 71 and the left figure handle 72 on a pattern "5." A variation can be given to a change pattern although this ** view game serves as HAZURE in these cases.

[0106] Although all other patterns are updated simultaneously and displayed with the gestalt of the above-mentioned operation after updating and displaying the last halt pattern, this invention is not limited to this and may be made to update for every pattern in order of a left figure handle and a right figure handle in a snowy country tunnel reach pattern.

[0107] Although the gestalt of the above-mentioned operation explained the case where this invention was applied to the pachinko game machine 1, this invention is not limited to this and may apply this invention to the game machine which carries out the simulation of the operation of the pachinko game machine 1. In this case, when it distinguishes that the game sphere passed the special pattern starting mouth 5 which carried out the simulation of the movement of the game machine described above when CPU of a game machine performed a predetermined program, and was described above as the result, the same lottery as the above can be performed and the pattern can be indicated by change. The program of this game machine can be stored in CD-ROM etc., and can be circulated apart from a game machine.

[0108]

[Effect of the Invention] Since other identification information is made to update on

image display equipment corresponding to renewal of the identification information stopped at the end as explained above according to this invention, change can be given to a change display pattern and, thereby, the interest of a game can be raised.

[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the front view of the pachinko game machine concerning the gestalt of operation of this invention.

[Drawing 2] It is the block diagram showing the example of a system configuration centering on a game control section.

[Drawing 3] It is the block diagram showing the example of a system configuration in the display-control section.

[Drawing 4] It is the block diagram showing the example of a system configuration in a sound control section.

[Drawing 5] It is the flow chart which shows the example of processing operation in a game control section.

[Drawing 6] It is the flow chart which shows the example [in / pattern process processing / specially] of processing of drawing 5 .

[Drawing 7] Usually, it is drawing showing the example of a display on the special pattern display at the time of a change pattern.

[Drawing 8] It is the flow chart which shows display processing of a normal reach pattern.

[Drawing 9] It is drawing showing the example of a display on the special pattern display at the time of a normal reach pattern.

[Drawing 10] It is the flow chart which shows display processing of a normal tunnel reach pattern.

[Drawing 11] It is drawing showing the example of a display on the special pattern display at the time of a normal tunnel reach pattern.

[Drawing 12] It is the flow chart which shows display processing of a snowy country tunnel reach pattern.

[Drawing 13] It is drawing showing the example of a display on the special pattern display at the time of a snowy country tunnel reach pattern.

[Drawing 14] It is the flow chart which shows display processing of an exhaust gas reach pattern.

[Drawing 15] It is drawing showing the example of a display on the special pattern display at the time of an exhaust gas reach pattern.

[Drawing 16] It is drawing showing the example of a display on the special pattern display at the time of an exhaust gas reach pattern.

[Description of Notations]

1 Pachinko Game Machine

6 It is Pattern Display Specially.

200 Game Control Section

400 Display–Control Section

500 Sound Control Section

[Translation done.]

*** NOTICES ***

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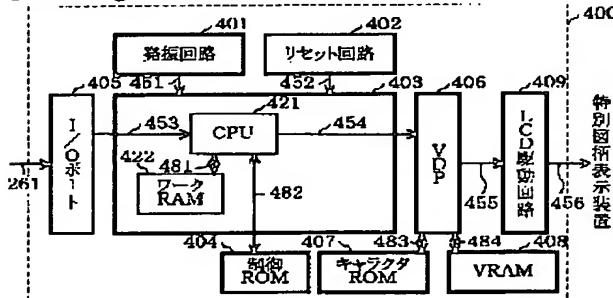
1. This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

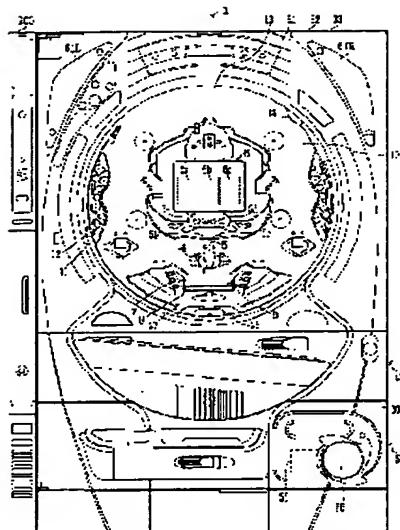
3. In the drawings, any words are not translated.

DRAWINGS

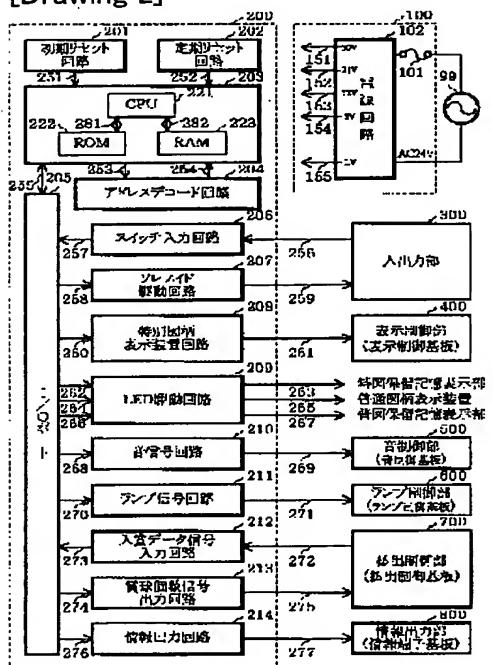
[Drawing 3]



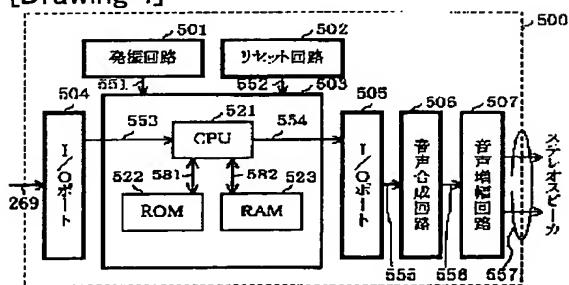
[Drawing 1]



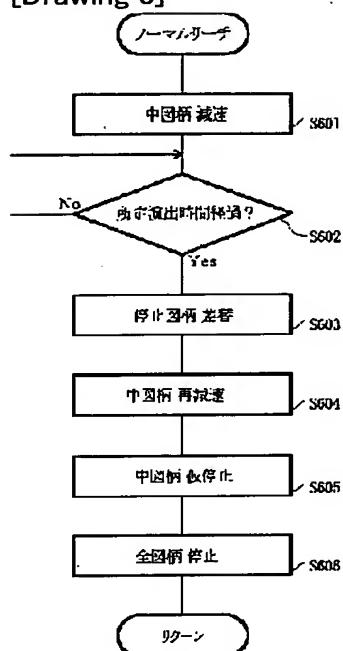
[Drawing 2]



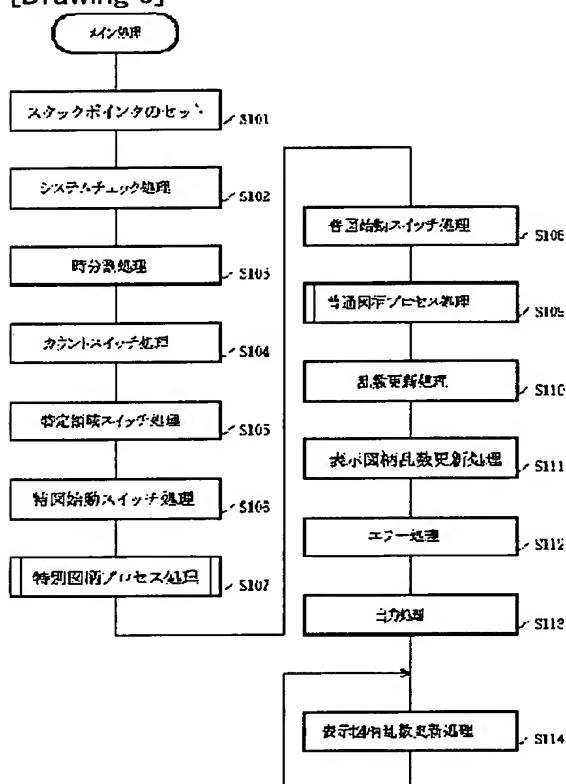
[Drawing 4]



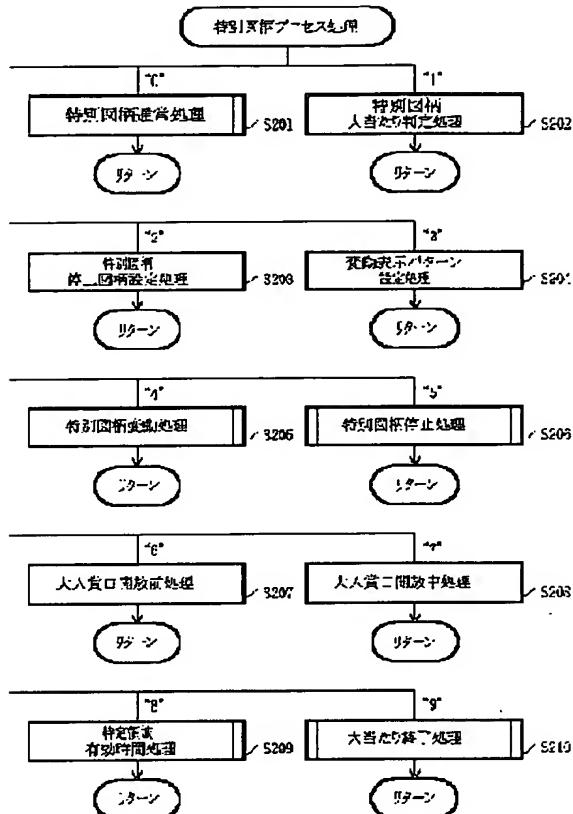
[Drawing 8]



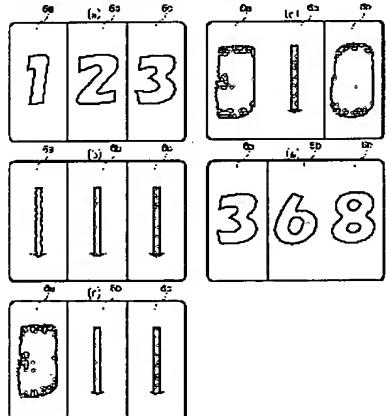
[Drawing 5]



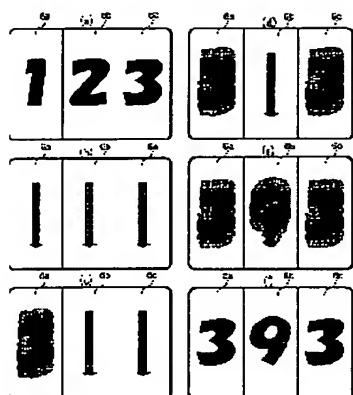
[Drawing 6]



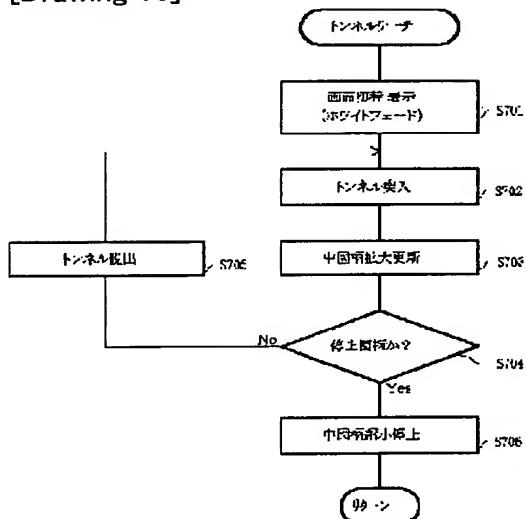
[Drawing 7]



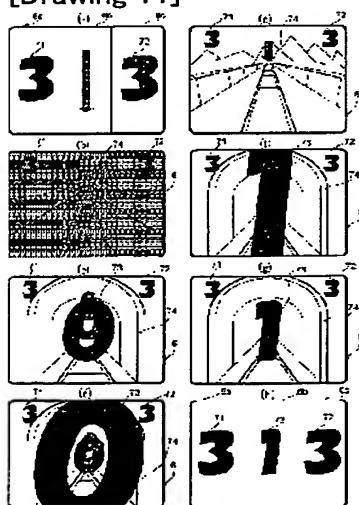
[Drawing 9]



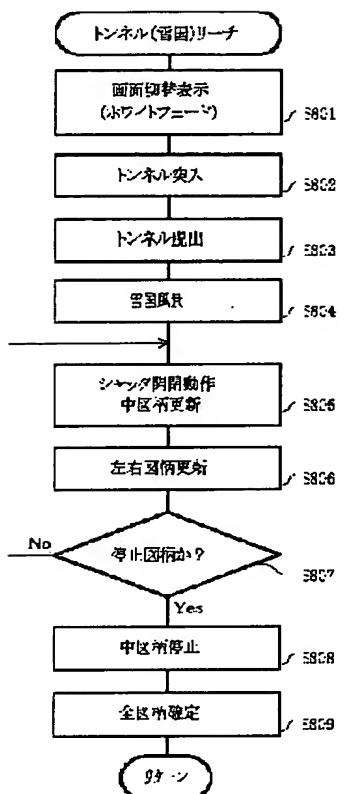
[Drawing 10]



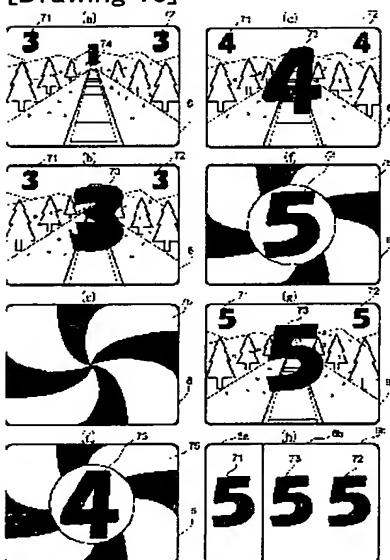
[Drawing 11]



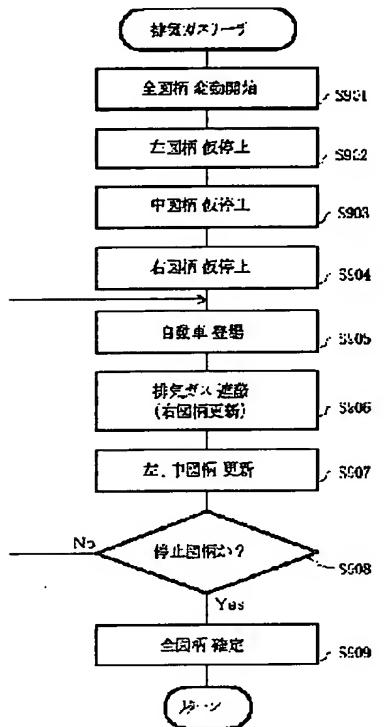
[Drawing 12]



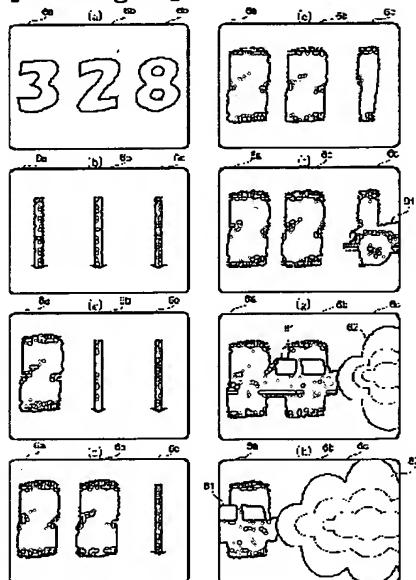
[Drawing 13]



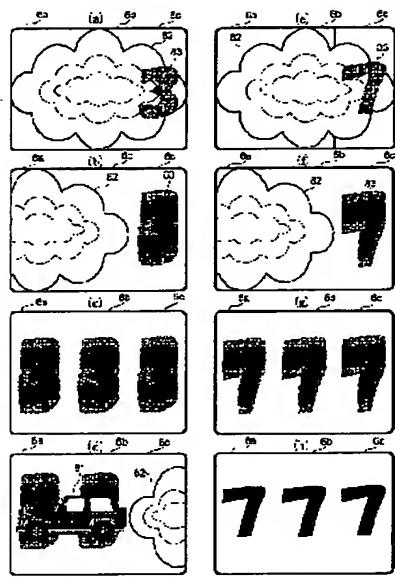
[Drawing 14]



[Drawing 15]



[Drawing 16]



[Translation done.]